

Using urban planning to offer a healthy food environment around schools

How food options influence the health of our young people

Obesity is a major public health issue that can strike as soon as early childhood and carries numerous health consequences: type 2 diabetes, cardiovascular disease, high blood pressure, and certain cancers. In Quebec, nearly one in four children is overweight¹. Given that obesity in childhood increases the risk for obesity in adulthood, it is essential to take preventive action². Through their areas of jurisdiction, their powers, and their expertise in urban planning, municipalities can contribute greatly to building healthy living environments conducive to healthy eating.

The environment in which we live has a large influence on our eating habits. Reports show that consumption of processed foods purchased in grocery stores and prepared foods ordered in restaurants has been on the rise over the past few decades^{3,4}. Among young people, the proliferation and accessibility of fast-food restaurants contribute to the increased consumption of "junk food". In fact:

- over 50% of Quebec youths take at least one meal in a restaurant each week⁵;
- the presence of fast-food restaurants near schools has a significant effect on obesity risk^{6,7}.

Portrait of the food environment of Quebec schools

In the aim of ensuring the quality of the food options in schools, in 2007 the Quebec Ministry of Education, Leisure and Sport (MELS) introduced a framework policy on healthy eating and active living throughout the province's education network. Unfortunately, the proximity of restaurants and convenience stores to schools undercuts the efforts deployed by schools. In Quebec:

- close to 40% of public schools are within 15 minutes walking distance of a fast-food restaurant⁸;
- more than 60% of public schools are within 15 minutes walking distance of a convenience store⁹;
- 89% of young people estimate that these restaurants are close enough to eat outside school at lunchtime¹⁰;
- 46% of the population lives in areas poorly served by food retailers (supermarkets, grocery stores, community markets, fruit and vegetable stands)¹¹.

Adolescents are drawn by the speed of service, taste and low price of food offered in fast-food outlets. The presence of these businesses in the living environment of young people constitutes a consumption incentive and undermines the promotion of healthy eating.



Urban planning decisions have an influence on the eating habits of young people

It is a known fact that municipalities play a fundamental role in improving the quality of life of the population through land use planning. Municipalities have the power to adopt by-laws in the interest of the general well-being of the population¹² and they can regulate the use of certain zones in order to allow, limit or prohibit certain specific uses. Urban planning tools can be used to reduce the number of fast-food restaurants present in the living environment of young people. Thus, through coherent urban planning, municipalities can be key players in the promotion of healthy eating. For example, when new schools are built, the sites chosen are at times still surrounded by vacant lots. If so, why not take advantage of the situation to intervene upstream in order to prohibit the establishment of fast-food outlets, keep them at a distance, or limit their numbers? Why not seize the opportunity to create school environments where fruit and vegetables are given greater visibility (e.g., fruit stands, community gardens, authorized itinerant vendors)?

Regulatory options for limiting the establishment of fast-food restaurants near schools

It need be said from the start that it is not possible to prohibit one chain of fast-food restaurants specifically or to discriminate against certain types of restaurant based on their menu. Zoning by-laws cannot discriminate against persons or businesses. However, depending on the intervention setting, municipalities have several types of tools at their disposal to limit the establishment of fast-food outlets in the vicinity of schools:

- Prohibiting main use (e.g., restaurant) or accessory use (e.g., food counter in a gasoline station)
 is a way to delimit zones where fast-food restaurants are not allowed, particularly in new and
 predominantly residential areas;
- **Establishing a minimum separation distance** is a way to ensure that certain types of restaurant are not allowed to operate within a given radius of an educational institution;
- **Setting use quotas** is a way to limit the maximum number of restaurants in zones adjacent to schools;
- Conditional use permits allow defining the criteria for authorizing a restaurant to operate in the
 zones adjacent to educational institutions (e.g., excluding franchises in favour of local businesses;
 preferring table service over counter service in order to avoid an excessive increase in
 automobile traffic; limiting waste from disposable dishware; offering a safer and more pleasant
 neighbourhood environment).

Adopting by-laws in order to limit the establishment of fast-food outlets in the vicinity of schools is a process that demands a strong understanding of the territory, requires taking existing by-laws into account, and necessitates collaboration among multiple stakeholders. In addition to municipal decision-makers, this course of action solicits the involvement of the education, health, business, and community sectors as well.

Get going!

For further information, please refer to the document titled *The school zone and nutrition: a guide for the municipal sector* at http://www.aspq.org/documents/file/guide-zonage-version-finale-anglaise.pdf.



References

¹ Tjepkema, M. et M. Shields (2005). *Obésité mesurée : obésité chez les adultes au Canada*, Ottawa, Statistique Canada, produit no 82-620-MWF20050001, 35 pages. Repéré le 16 novembre 2012 à http://www.statcan.gc.ca/pub/82-620-m/2005001/article/adults-adultes/8060-fra.htm

² Singh, A. S., Mulder, C., Twisk, J.W., van Mechelen, W., et Chinapaw, M.J. (2008). Tracking of childhood overweight into adulthood: a systematic review of the literature. *Obesity Reviews*;9(5):474-88.

³ Blanchet, C., Plante, C. & Rochette, L. (2009). La consommation alimentaire et les apports nutritionnels des adultes québécois. Rapport de l'Enquête sur la santé dans les collectivités canadiennes (Cycle 2.2). Québec : Institut national de santé publique du Québec.

⁴ Santé Canada (2010). Amélioration des compétences culinaires. Synthèse des données probantes et des leçons pouvant orienter l'élaboration de programmes et de politiques. Repéré le 6 juillet 2011 à http://www.hc-sc.gc.ca/fn-an/nutrition/child-enfant/cfps-acc-synthes-fra.php.

⁵ Lavallé, C. (2004). Enquête sociale et de santé auprès des enfants et des adolescents québécois. Volet nutrition, Institut de la statistique du Québec.

⁶ Austin, S.B., Melly, S.J., Sanchez, B.N., Patel, A., Buka, S. et Gortmaker, S.L. (2005). Clustering of fast food restaurants around schools: a novel application of spatial statistics to the study of food environments. *American Journal of Public Health*, *95*(9), 1575-81.

⁷ Currie, J., Della Vigna, S., Moretti, E. et Pahtania, V. (2009). *The Effect of Fast Food Restaurants on Obesity*. National Bureau of Economic Research – NBER, working paper #4721.

⁸ Résultats de l'Étude portant sur les habitudes alimentaires les jours d'école auprès des élèves du secondaire deuxième cycle menée par l'Association pour la santé publique du Québec auprès de 1033 répondants. (Septembre 2010). Résultats analysés par la firme SOM.

⁹ Résultats de l'Étude portant sur les habitudes alimentaires les jours d'école auprès des élèves du secondaire deuxième cycle menée par l'Association pour la santé publique du Québec auprès de 1033 répondants. (Septembre 2010). Résultats analysés par la firme SOM.

¹⁰ Résultats de l'Étude portant sur les habitudes alimentaires les jours d'école auprès des élèves du secondaire deuxième cycle menée par l'Association pour la santé publique du Québec auprès de 1033 répondants. (Septembre 2010). Résultats analysés par la firme SOM.

¹¹ Robitaille, E. et Bergeron, P. (2013, juillet). *Accessibilité géographique aux commerces alimentaires au Québec : analyse de situation et perspectives d'interventions*. Direction du développement des individus et des communautés, Institut national de santé publique du Québec.

¹² Selon l'article 113 de la *Loi sur l'aménagement et l'urbanisme*. L.R.Q., c. A19.1